CHILD ACQUISITION OF SPANISH CLITIC IMPERSONAL CONSTRUCTIONS: AN EMPERICAL STUDY ON THE CHILDRES CORPROA

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ABSTRACT

DANIEL JAMES SEABROOKS: Child Acquisition of Spanish Clitic Impersonal Constructions: An Empirical Study on the CHILDES Corpora (Under the direction and guidance of Randall Hendrick and Bruno Estagarribia)

The passive and impersonal uses of the Spanish clitic se have been the focus of an important linguistic debate; they are often considered to be similar because they both de-emphasize the logical subject of the verb, but they differ in the way they affect the verb's transitivity. Many theories have suggested that the clitic se raises to subject position and that these two forms are syntactically identical with a difference in the application of subject-verb agreement (e.g. Cinque 1988, Oesterreicher 1992, and Rivero 2002). Amaya Mendikoetxea's (2008) analysis of Romance clitic impersonal constructions se/si offers a novel understanding, not only of the relationship between these two Spanish clitic constructions, but also of how the impersonal se construction differs from simple transitive sentences. Specifically, she theorizes that both impersonal and passive constructions containing se contain a generic null pronoun (which she calls G-pro) as Spec of vP and that they differ in whether or not v assigns accusative case to the verb's complement. This difference in case marking determines whether the verb's complement raises to subject (to yield the passive se construction) or whether the verb's complement remains in place and a phonologically null expletive fills the subject position. With this analysis in mind, a CHILDES longitudinal study is conducted to assess children's acquisition of Mendikoetxea's proposed structures. The results confirm Mendikoetxea's basic claim that there is a distinction among simple transitive sentences, impersonals with se and passives with se.

For my grandmother and best friend, Cora Y. El

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To my Nona – you have always been the shield that relentlessly protected me; the port that safely guided me; and the pedestal that constantly uplifted me to greatness. Your dedication to your friends and family allowed me to reach this point, and I thank you. Finally, I thank my family and friends worldwide for their continual support and encouragement.

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LIST OF ABBREVIATIONS

1 first person

3 third person

PL plural

SG singular

CL-IC clitic impersonal construction

EPP Extended Projection Principle

NOM nominative case

ACC accusative case

DAT dative case

uφ uninterpretable feature

 $i\phi$ interpretable feature

D definite

0P zero person

GNP generic null pronoun

MLU mean length of utterance

1. Introduction

There are many approaches to understanding the relationship between impersonal and passive uses of the clitic *se* in Spanish (and, perhaps, more broadly the clitic *se/si* in Romance Languages).

- (1) Aquí se come unas manzanas. here se eat-3SG a few apples 'One eats a few apples here.'
- (2) Aquí se comen unas manzanas. here se eat-3PL the apples *'Here apples are eaten.'*

Some previous research (e.g., Cinque 1988, Oesterreicher 1992, Rivero 2002, and D'Alessandro 2004) claims that the clitics in these impersonal and passive, (1) and (2), respectively, constructions occupy the subject position, just like the subject in simple transitive sentences. Other scholars (Suñer 1976) propose that the thematic patient raises to subject position instead (similar to what has been traditionally claimed for canonical passive constructions) and the impersonal and passive uses diverge in whether subject-verb agreement takes place. Ultimately, the research concerning the clitic *se* and its uses has taken many forms, as scholars struggle to explain its distribution and meaning.

In Chapter 2 I provide a literature review of the varied approaches to the clitic impersonal constructions (CL-IC (Gelman, Goetz, Sarnecka, & Flukes, 2008)) in Spanish. Working with the hypothesis that the Romance clitic constructions are both structurally different from each other as well as from simple transitive constructions, as outlined in the theory of Mendikoetxea (2008), I

aim to test that hypothesis against data on the first appearance and frequency of usage of the clitic constructions in children's spontaneous speech. Such data may potentially bear on the proposed three-way split in the theory of Mendikoetxea (2008). Specifically, her theory is confirmed if children acquire and use the three constructions differently in the acquisition process.

The results from this thesis show a strong correlation between mean length of utterance (MLU) and the acquisition of the three syntactic constructions under investigation here. In addition, the results suggest that the CL-ICs impersonal are acquired much later than CL-ICs passive and are used at a much lower frequency. Likewise, the CL-IC passives appear earlier and at a much higher frequency than the CL-ICs impersonal. These results lead me to speculate on the acquisition of null generic pronoun, how ambiguity between the CL-ICs impersonal and passives influence on the language acquisition mechanism, and/or even a pragmatic understanding of like passive and impersonal expressions cross-linguistically.

In Chapter 2: Literature Review: The Three-Way Split, I explore Mendikoetxea's unique analysis of these two CL-IC forms in Romance, which she claims vary in how they make use of v and vP. Likewise, I look into the theories pertaining to the chronological properties of language acquisition. In Chapter 3: Predictions and Hypothesis, I set out expectations on the basis of how passive and impersonal expressions differ in Spanish, and in Chapter 4: Experiment, I outline my experiment design and procedure. In Chapter 5: Results and Analysis, I present the raw data, how it was collected, and how it was analyzed. Chapter 6: Discussion & Conclusions explores some of the implications of the data as well as some possible avenues for future research, hopefully drawing inferences about cross-linguistic patterns.

2. Literature Review: The Three-Way Split

This chapter explores the theory on the clitic impersonal constructions passives and impersonals with *se/si* (henceforth CL-ICs impersonal and CL-ICs passive). Specifically, it outlines Amaya Mendikoetxea's (2008) three-structure split analysis pro. Mendikoetxea analyzes the syntactic organization of structures making use of Romance CL-IC *se/si* within the general framework suggested in Chomsky's Minimalist Program (e.g. Chomsky 1995; 2000; 2001; 2005). Mendikoetxea argues that 1) CL-IC *se/si* syntax is based on complex agreement operations involving the subject position empty category, argument of the object and functional heads of T(ense) and *v*, and (indirectly) 2) the CL-ICs impersonal differ from simple transitive sentences (because the impersonals contain a generic null pronoun that occupies spec of *v*P) and CL-ICs passive (because the impersonal assigns accusative case, preventing the verb's complement from moving to occupy specifier of TP).

Her theory serves as the foundation of the experiment, which aims to test the proposed three-way structural split between the simple transitive, CL-ICs impersonal and CL-ICs passive. The second subsection briefly addresses the nature of child acquisition of varying grammatical structures. More importantly, the second subsection establishes how staggered acquisition has been paramount in identifying (or confirming) structural differences and markedness.

2.1 Mendikoetxea Three-Way Split Analysis

The two *se* constructions, impersonals such as (1) and passives such as (2), have been the focus of competing theoretical analyses. Notice that the finite verb in (1) appears in its 3rd singular form and does not agree with the logical object and semantic patient 'libros.' However, in the second construction type illustrated in (2), the finite verb, 'vende,' does agree in person, number and gender with the logical object and semantic patient. On the basis of these syntactic and semantic properties, these two *se* constructions have been labeled an impersonal and a passive, respectively, and I utilize the established terms CL-IC impersonal and CL-IC passive when referencing sentences like (1) and (2) respectively.

- (1) Aquí se vende unos libros. here se sell-3SG a few books 'One sells a few books here.'
- (2) Aquí se venden los libros. here se sell-3PL the books *'Here books are sold.'*

In attempts to distinguish them, one theoretical approach assimilates constructions like (1) to simple transitive constructions like (3).

(3) Juan vende los libros. Juan sell-3SG the apples 'Juan sells the books.'

On this view, 'libros' is the complement of the verb 'vender' in (1) and *se* occupies the syntactic subject position, parallel to 'Juan' in (3). Cinque 1988, Oesterreicher 1992, Rivero 2002, offer proposals of this general type. ¹ However, a group of competing theoretical approaches avoid analyzing *se* as a subject in this manner. These perspectives chiefly differ because the *se* in the

¹ Many scholars highlight that this pattern is pervasive in the Romance languages. For example, Maiden & Robustelli (2000) and D'Allesandro (2004) in their discussion on Italian *si*, agree with this tradition.

impersonal construction is not a subject parallel to 'Juan' in the simple transitive. Proposals in this tradition divide on the question of what the syntactic subject of (1) is and whether it is the same as in (2). For example, Suñer (1976) treats (1) and (2) as structurally identical, with 'libros' as a syntactic subject in both. The difference between these two constructions would be located in whether a subject verb agreement operation has applied or not.

One recent proposal in this tradition has given distinct structural analyses to (1), (2), and (3), giving rise to this notion of a three-way split analysis. Mendikoetxea (2008), suggests that (1) and (2) differ in the composition of the vP shell headed by the functional head v (voice), which selects the VP headed by *vender* as its complement. Example (1) has an 'active' v that assigns accusative case to the complement of the verb, and (2) has a 'passive' v that does not case mark the verb's complement. She argues that (1) and (2) differ from the simple transitive in (3) because they both contain a generic null pronoun (G-pro) that is assigned the verb's agent thematic role, and se appears above TP as a type of default agreement functional head that she labels C(litic)P. Examples (4), (5) and (6) give the structures Mendikoetxea would assign to (1)–(3). Please note, the bracketings below represent pre-movement relations while the syntax trees convey post-movement relations².

(4) [TP T [vP Juan [v' v [VP [v vende] [DP los libros]]]]] u ϕ i ϕ u ϕ i ϕ EPP D D D NOM NOM ACC

⁻

 $^{^2}$ uφ are uninterpretable features and iφ are interpretable features. Uninterpretable features are triggers for other syntactic operations that eliminate them before the structure is provided to a component tasked with interpreting the structure. Once a structure no longer contains uφ's, it is believed that the structure necessarily spells out.

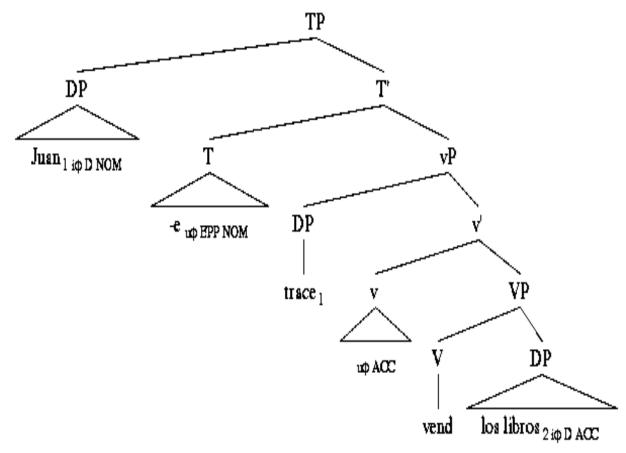


Figure 1: Simple transitive sentence syntactic structure

$$(5) \begin{bmatrix} \text{CP [NP } \textit{Aqui} \end{bmatrix} \begin{bmatrix} \text{C' } \textit{se} & \text{[TP [T' } \textit{T [vP [DP } \textit{GNP}^3] & [v' \textit{ V [vP [v } \textit{vende}] [DP } \textit{los libros}]]]]]]]} \\ \text{i}\phi (0p) & \text{u}\phi & \text{i}\phi & \text{u}\phi & \phi \text{ (3PL)} \\ \text{EPP } & \text{D} & \text{D} \\ \text{NOM } & \text{NOM } & \text{ACC} & \text{ACC} \end{bmatrix}$$

6

³ GNP refers to generic null pronouns.

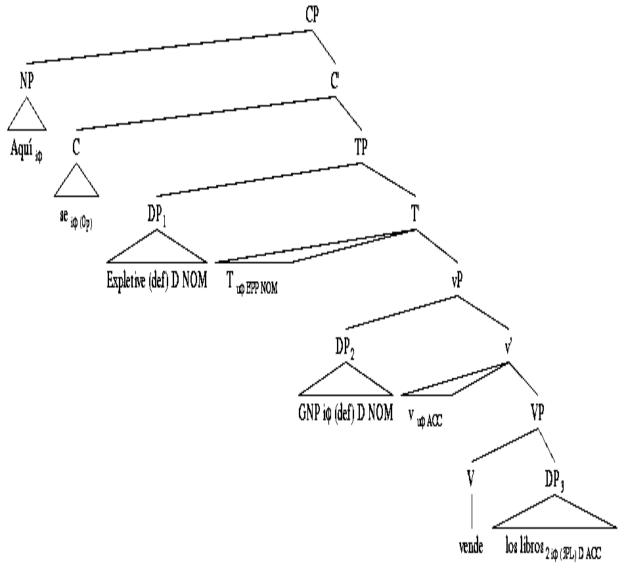


Figure 2: CL-IC Impersonal syntactic structure

(6) [CP [NP
$$Aqui$$
] [C' se [TP [T T [VP [DP GNP] [V' v [VP [V $venden$] [DP $los\ libros$]]]]]]]] i ϕ (0p) u ϕ i ϕ u ϕ i ϕ EPP D NOM NOM

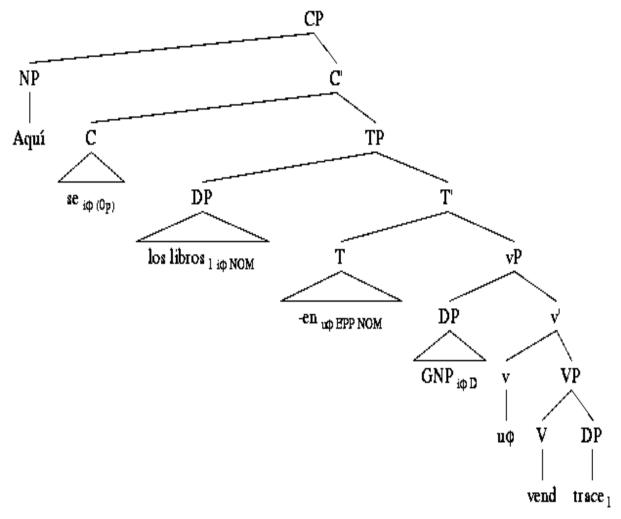


Figure 3: CL-IC Passive syntactic structure

Mendikoetxea's analysis has the following salient characteristics:

- i. Se has 0-person features without any case, gender or number specification (making it inert for checking case or φ -features).
- ii. Little *v* has as its specifier a phonologically null pronoun, which she dubs a *G*-pro and which is assigned the agent theta role.
- iii. There are two possible v heads that differ in whether they carry an accusative case feature. When v lacks a case feature the complement of the verb will not be able to check any case

- feature without raising (overtly or covertly at Logical Form) to specifier of TP position and checking nominative case, as in (2).
- iv. If *v* contains an accusative case feature, the complement of the verb will remain in the VP.

 The requirement that there be a syntactic subject (the EPP requirement) will be satisfied by the insertion of a phonologically null expletive element.
- v. The clitic *se* is not in specifier of TP (subject position) in either structure but does occupy the same structural position in both hierarchies.

Mendikoetxea's analysis crucially treats (1), (2) and (3) as structurally distinct, depending on the selection of different types of v and what occupies the specifier of TP (subject) position. Other analyses share her separation of (1) and (2), although the nature of the distinction may not be structural. For example, if one does not make use of v, one may be led to encode the difference in (1) and (2) by recognizing two *se* formatives, following the line of thought in Cinque (1988), Belletti (1982) and Rizzi (1986). If one has an even more reduced theory of syntactic structure, as in Lexical Functional Grammar, one may code the difference between (1) and (2) in the interaction of the syntactic structure with aspects of lexical structure, as in Kelling (2006).

3. Predictions

It is an empirical issue whether (1) should be treated as parallel to (2) or (3), or whether it should be treated as a distinct structure. One possible way to evaluate empirically whether (1) is distinct from (2) and (3) is the following test of assessing how Spanish-speaking children acquire these structures. If children acquire these structures at different stages in their development, then Mendikoetxea's analysis is corroborated. If these structures appear at the same stage in the children's development, it means that either Mendikoetxea's claim that they are structurally different is incorrect (at least in children's grammars) or some other factors are at play.

Mendikoetxea's analysis predicts that the structures in (1) – (3) are syntactically distinct, but it does not claim that one or the other of these constructions are more natural in any sense. This would lead us to expect that their appearance in acquisition is not linguistically fixed. However, it is possible that the acquisition of these constructions is not random but exhibits a systematic ordering. It is commonly assumed, following the classic work of Jakobson (1990), that order of acquisition parallels cross-linguistic frequency. This assumption is labelled 'markedness theory'. To the extent that impersonal constructions are cross-linguistically less frequent than passives which in turn are less frequent than actives (Blevins 2003), and markedness theory would lead us to expect that the order of acquisition of our structures should be (3) before (2) and (2) before (1). The experiment results corroborating with or contradicting these predictions ultimately have a stake in the dialogue of the language learning mechanism, further outlined in the discussion chapter below.

4. Experiment

In this chapter, I discuss my methodology and how I conducted the experiment. I describe my child selection process from the CHILDES database, and explain my approaches to coding the three forms. Although coding for the simple transitive constructions is simple and easy to identify, coding between the two CL-ICs has limitations, primarily because in many instances of spontaneous speech, they appear similar (if not identical). These two CL-IC forms are not only syntactically similar but also semantically comparable because they look syntactically identical and can be interpreted similarly because the logical subject is not explicit. Therefore, I demonstrate how I address cases of ambiguity in this study as well.

4.1 Subjects

For the purposes of this study, I peruse the transcripts of four native Spanish speaking children to tally all instances of simple transitive sentences and CL-IC with *se*. The four target children Eduard (CHILDES/Spanish/Serrasole), Emilio (CHILDES/Spanish/Villa), María (CHILDES/Spanish/Ornat), and Iago (CHILDES/Spanish/Koine/elf) are selected due to their abundance of transcriptions throughout these selected ages needed to perform this longitudinal study. However, both age and mean length of utterance (MLU) are used as independent variables to measure for the general trends in acquisition of these forms. This study begins observing data before the age of 2;0 and ends at 4;6. Using the CLAN software, I calculate each child's (MLU) for each transcription.

With respect to described age range, Rodríguez-Mondoñedo (2008) reports that Spanish-speaking children acquire the DAM as early as 2;8 at 98% accuracy and Jackson-Maldonado et al. (1998) reports that children produce the *se* clitic around that age (2;4 – 3;0), also. Given these facts, I code within the age limits 1;4 – 4;6; and for each construction, I code all the relative frequencies with respect to age (in months) and MLU. This not only covers the expected ages of acquisition, but also detects any relatively early acquisitions, given Jackson-Maldonado et al. results.

4.2 Coding

Coding for Simple Transitive Structures

When coding for the simple transitive sentence, I look only for speakers' production of a transitive verb inflected with verb-subject agreement. Given that Spanish is a no subject (NS) language, I also allow for verbs without phonologically overt subjects to be counted as tokens. That is, instances of 'subject+verb+object' strings and 'verb+object' string are both coded as instances of simple transitive sentences. Likewise, strings containing an agentive subjects and both preverbal accusative and dative clitics – *lo*, *la*, *los*, *las*, *le* and *les* – (i.e. 'subject_(agentive)+clitic_(ACC+DAT)+verb') are coded as simple transitive sentences.

1. If any of the aforementioned sequences present themselves in the corpora, then I code the occurrence as a token of the *Simple Transitive class*.

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⁴ Cases of *se* are included in the count when the *se* is an allomorph of *le* and *les*, as well as overt reflexive uses with animate agents. This is because the third person Spanish dative clitics, *le* and *les*, change to *se* when it precedes an accusative clitic.

Coding for CL-IC with se

Even though I consider CL-IC with *se* structurally identical for the purposes of this thesis, these passive forms differ in the degree of their respective transitivity. Mendikoetxea (1998) provides examples of the hierarchy, which I provide below in the order of *impersonal*, *passive*, *middle passive*, and *inchoative*. Pay close attention to the latter three as they highlight the similarities among the intransitivizing varieties. More specifically, the role of the agent of the activity denoted by the verb intuitively declines as one proceeds from (i) to (iv).

- i. En los tiempos de la inquisición se quemaba a los herejes. 'During the Spanish Inquisition, they burned the heretics.'
- ii. Se quemó el bosque para evitar la plaga.The forest was burned to prevent the plague.
- iii. En épocas de sequía, los bosques se queman fácilmente. 'During droughts, the forests are burned down easily.'
- iv. Se quemó el bosque. 'The forest was burned down.'

Because younger children are not likely to produce complex sentences that can differentiate the them, I find it plausible to group (ii), (iii) and (iv) in one category.

Due to the multi-faceted use of the 3rd person morpheme *se*, there are cases where it is challenging to determine which use is being presented. I employ the following algorithm for categorizing the impersonal and passive uses of the impersonal clitic expressions. Firstly, I identify all occurrences of *se*, then I code for the instances of the passive and impersonal uses based on the following algorithm.⁵ In browsing throughout the corpora, I look for instances of contiguous *se* and a finite verb with third personal agreement inflection (singular and plural, alike). Specifically,

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⁵ Although absent from my analysis, I code for sub-categories of passive token that have been of interest in the scholarly literature (e.g. middle passive and inchoative examples). The tally of these sub-categories is presented as a service to interested readers and does not enter into the data analysis or results of my investigation, given that Mendikoetxea posits that the subcategories contain the same *se*

if there are examples of 'se+verb-3SG/PL,' then I employ the following steps to distinguish among them.

Coding for CL-IC Impersonals

There are several approaches to identify unambiguous impersonal *se* from the other instances. They are the following ways:

- 2. If the aforementioned sequence is present without subject verb disagreement, then I code the occurrence as an impersonal use.
- 3. If the aforementioned sequence appears with the DAM, then I code the occurrence as an impersonal use.
- 4. If the aforementioned sequence contains a verb that is unergative (meaning that there is a syntactic subject and semantic agent), then I code the occurrence as an impersonal use.
- 5. If the aforementioned sequence is preceded by negation to convey a negative formal command, then I code the occurrence as an impersonal use.
- 6. If the aforementioned sequence is preceded by the interrogative *cómo* ("how") in order to express a task with an agent then I code the occurrence as an impersonal use.
- 7. If the aforementioned sequence occurs and there is ambiguity between the impersonal and passive uses, but the verb otherwise resists passivization (e.g. *matar*), then I code the instance as an impersonal *se*.⁶

appear in CL-IC impersonals.

⁶ I rely on the verb's inherent transitivity when coding between the CL-IC with *se*. Di Tullio (2014) notes that some verbs, such as *asasinar* (assassinate), cannot be used with the CL-IC passives because it resists passivization more generally. Due to their preference for transitive structures verbs like *matar* (kill) are hard pressed to be used in a CL-IC passive and instead

In coding for CL-IC impersonals, I organize them into the subcategories disagreement (DIS), differential accusative marking (DAM), unergative (NGT), formal negative command (FNC), and pronominalization (PRO), albeit they do not factor into my analysis. The reader is directed to the appendix to gain insight and specifics on the data.

Coding for Subcategories of CL-IC Passives

Much like with CL-ICs impersonals, I place the CL-IC passive tokens into the subcategories middle passive (MID), inchoative (INC), and complete passive (COM), albeit they do not factor into my analysis (similar to the CL-ICs impersonal). Likewise, the reader is directed to the appendix sections for a further breakdown on the CL-IC passive coding.

There is one primary way to syntactically discern unambiguous CL-ICs passive from the CL-ICs impersonal: subject-verb agreement with a plural theme.

8. If the aforementioned sequence contains a verb that agrees with a plural logical object, then I code that occurrence as a passive use.

Because of my previous classification of inchoative instances as examples of CL-ICs passive, I consider utterances involving any of the following verbs as belonging to the passive-inchoative sub-class of passives.

- If the aforementioned sequence occurs and the context implies a change of state, then I code the occurrence as a passive use.
- convertirse
- esconderse
- abrirs
- despertarse
- mojarse
- acostarse

- caerse
- romperse
- estropearse
- asustarse
- escaparse
- subrise

- esconderse
- morirse
- acabarse
- perderse

10. If the aforementioned sequence occurs in a context that explains an inherent quality of the

logical object, then I code the occurrence as a passive use⁷.

Although there are not many cases of this type of passive, these children have demonstrated the

ability to produce them. In one instance, Eduardo's use of *cerrarse* is coded as a middle passive

use primarily because of the context, where he provides an adjunct of the inherent property of the

item. Consider the following excerpt from his transcripts

Example 1:

Eduardo: está muy duro. (It is very hard)

Eduardo: ya no se cierra. (It does not close already)

Eduardo: ya no se cierra, mama. (Mom, it does not close already)

Context is quite crucial in determining among the ambiguous examples and back-to-back

expressions can be indicative of the child's intent. With children often repeating themselves,

recently previous utterances can sometimes be unambiguous (impersonal or passive expression),

and therefore be a guide to disambiguate. For example, María repeatedly says no se apaga la tele

(Impersonal Expression), but when prompted to for an alternative response, she says that instead

se enciende. Consider the following excerpt below.

Example 2:

María: oye no se apaga la tele. (Listen, one does not turn off the television)

Mother: no se apaga? (One does not turn it off)

María: no.

⁷ However, in one instance Eduardo's use of *cerrarse* is coded as *Passive-Middle* primarily

because of the context, where he provides an adjunct of the inherent property of the item.

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María: se enciende. (one turns it on)

- 11. If the aforementioned sequence occurs in context with no other logical patient, then I code the occurrence as a passive use.⁸
- 12. If the aforementioned sequence occurs and there is a case of a repeated utterance with the former being discernible, then I code based on contextual evidence in favor of the previous coding.

8 This is because there is no possible way to produce an impersonal expression (as a repeated utterance) and drop the intended object without pronominalizing albeit Spanish is a pro-drop (or

utterance) and drop the intended object without pronominalizing, albeit Spanish is a pro-drop (or no subject) language. This is contingent on it being another case of back-to-back expressions.

5. Results and Analysis

In this chapter, I present the results of my study and explain how and why I have chosen to analyze the data with respect to MLU.

5.1 Data Introduction

For the four children María, Iago, Eduardo, and Emilio there are a total of 36 different ages (in months) recorded, as well 2,964 simple transitive sentences, 130 CL-ICs impersonal tokens and 352 CL-ICs passive tokens; and these counts amount to a total of 3,446 constructions considered in this analysis of the dataset. The individual children have different weights in these totals as well because they vary greatly not only in how many transcriptions but also the length of any given transcription as well. María has only 14 different ages identified, Emilio has 25 different ages identified, Iago has 19 different ages identified, and Eduardo has 11 different ages identified.

A preliminary glance at the dataset shows that there is a significant difference in the use of the three different syntactic constructions, with simple transitive sentences having the most occurrences and CL-ICs having the least. Table 1 below confirms this difference among the three structures. If the reader looks closely, they can see that the simple transitive sentence appears at 17 months, the CL-IC passive at 19 months, and the CL-IC impersonal consistently after 24 months⁹. The reader is also directed to Appendix B, which contains child-specific information. Table 1 also shows that the frequency of use of the three constructions mirrors the order of their

 $^{^9}$ Technically, the first CL-IC impersonal presents itself at 20 months -1 token - but it appears to be a misinterpreted case due to coding error.

first use, with simple transitive used more frequently than passive which in turn is used more frequently than impersonal.

Age (Months)	Simple Transitive	Impersonal	Passive	TOTAL
11	0%	0%	0%	0
12	0%	0%	0%	0
14	0%	0%	0%	0
16	0%	0%	0%	0
17	100%	0%	0%	4
18	100%	0%	0%	1
19	33%	0%	67%	3
20	50%	50%	0%	2
21	88%	0%	13%	24
22	63%	0%	37%	46
23	69%	7%	24%	117
24	77%	2%	20%	124
25	78%	6%	16%	145
26	84%	6%	10%	182
27	100%	0%	0%	39
28	81%	5%	14%	256
29	87%	5%	8%	277
30	91%	1%	8%	237
31	88%	1%	11%	95
32	90%	2%	8%	371
33	100%	0%	0%	1
34	91%	0%	9%	11
35	93%	1%	6%	271
36	91%	9%	0%	11
37	25%	0%	75%	8
38	78%	0%	22%	9
39	80%	0%	20%	15
40	90%	0%	10%	20
41	90%	0%	10%	10
42	86%	4%	10%	311
43	94%	4%	3%	217
46	85%	7%	8%	321
47	77%	6%	17%	94
48	95%	2%	3%	58
49	87%	2%	10%	87
54	85%	8%	7%	89

Table 1: Relative frequencies of each form with respect to age (in percent)

To better answer the two questions presented in the chapters above – whether these three are acquired at different intervals of development, and whether there is there is a possible order – I take the following steps. First, a glance at the table reveals that all the children acquire the simple transitive sentences much sooner than the CL-ICs passive, which in turn also precedes the CL-IC impersonals. ¹⁰ Second, I look at each child's individual acquisition to determine if their production align with the holistic pattern. Afterwards I run various statistical tests strongly suggest that there is stronger correlation between the acquisition of each construction and MLU than with age (in months). ¹¹ The data corroborate the hypothesis that these constructions are structurally different; however, they do not corroborate the previously hypothesized order of their acquisition. Likewise, this analysis shows that there is a robust relationship between MLU and the frequency of these constructions, which serves as an indicator of acquisition of the three forms in question. It is important to note that I assume that there is acquisition when the child consistently employs one of the uses (such as at least one CL-IC impersonal in two consecutive transcriptions).

5.2 Varied Acquisitions of the Three Forms

In looking at the data, there is a common trend among the children to acquire the targeted syntactic constructions in the order of simple transitive sentences (1st), passive expressions (2nd), and impersonal expressions (3rd). The following four tables demonstrate each child's acquisition of the three syntactic constructions with respect to both age and MLU.

1/

¹⁰ Note: this excludes the one CL-ICs impersonal token that precede CL-ICs passive clusters from one particular child.

¹¹ There are inherent correlations between age and MLU, and the various tests also demonstrate that there is a correlation between age and the acquisition of the three forms, but there seems to be a stronger correlation between MLU and acquisition.

María	Simple Transitive	CL-IC Impersonals	CL-IC Passives
Age (in months)	19	22	19
$___MLU$	2.27	2.66	2.27

Table 2: María's acquisition of these forms

Emilio	Simple Transitive	CL-IC Impersonal	CL-IC Passive
Age (in months)	17	31	22
$_$ MLU	1.06	2.2	1.19

Table 3: Emilio's acquisition of these forms

Eduardo	Simple Transitive	CL-IC Impersonal	CL-IC Passive
Age (in months)	34	46	28
MLU	2.09	2.27	2.05

Table 4: Eduardo's acquisition of these forms

Iago	Simple Transitive	CL-IC Impersonal	CL-IC Passive
Age (in months)	28	36	38
<u>MLU</u>	1.65	2.64	2.15

Table 5: Iago's acquisition of these forms

Although there is no standard age or MLU when these forms seem to be acquired, there is an important generalization: these children tend to produce simple transitive forms first and CL-ICs impersonal last. CI-ICs passive are acquired second in acquisition and are used at a much higher use frequency than CL-ICs impersonal. After further analysis, it is apparent that MLU is a clearer indicator for acquisition of these forms than age, but only half of the four children follow the given pattern. It is worth noting that Eduardo and María (who deviate from the pattern) is because the it seems that simple transitive sentences and CL-ICs passive appear with nearly identical MLU. This finding hints at two possible reasons, one pertaining to the coding algorithm and the other suggesting that CL-ICs passives are easier to produce. With the exception of Iago, the other three children follow this same patter with respect to age, and this highlights that there is a correlation

between age and the acquisition of these three forms. A more thorough review of the holistic dataset confirms that as a child's MLU increases, his or her ability to produce these increases with respects to the given order.

6. Discussion & Conclusions

In this chapter I discuss the implications of the experimental results as they pertain to the syntactic structures among simple transitive sentences and two CL-IC with *se* in Spanish. Because of the limitations to the experiment, I also explain how these challenges may have affected the experiment, and I aim to discuss other areas of future research.

6.1 Implications

In evaluating the hypothesis about these three syntactic structures generated by Mendikoetxea's 2008 analysis, my results corroborate that the theoretically proposed structural differences among the three constructions. In evaluating the second hypothesis generated by markedness theory, the results loosely suggest that order of acquisition follows the order expected by markedness theory. My study observed four children's acquisition and spontaneous uses of these constructions ultimately making the following points:

- i. The four children show a tendency to acquire these forms at different stages in language acquisition, which supports Mendikoetxea's notion of a syntactic difference among forms presented in the first chapter.
- The trend in the order of acquisition is simple transitive sentences, CL-ICs passive and CL-ICs impersonal.
- iii. The children produce simple transitive sentences at a much higher frequency than the two CL-ICs with *se*. Furthermore, CL-IC impersonal cases appear with the lowest frequencies.

- iv. It appears that there is a strong correlation between a child's mean length of utterance and the acquisition of the three forms; this contrasts with the age as a strong indicator of their respective acquisitions.
- v. The fact that CL-ICs passive sometimes appear as early as simple transitive sentences (whereas CL-ICS impersonal lag much behind) implies that CL-ICs passive may be the default form for CL-ICs in Spanish.

Given these five immediate observations, there are questions regarding the acquisition of generic null pronouns, the role of valence in acquisition, and children's language acquisition mechanism especially as it applies to structurally similar CL-ICs with *se/si*. As discussed in chapter 2, Mendikoetxea (2008) structural argument for CL-ICs with *se/si* call for the presence of generic null pronoun to serve as the Spec of *v*P, and a phonologically null expletive appearing in the Spec of TP (in the CL-IC impersonal case). Since children demonstrate acquisition of CL-ICs impersonal last, and the two Cl-CI with *se* differ in what raises to Spec of T, it appears that the syntactic operation that involved merging the phonologically null expletive with T is more challenging for the language learning mechanism than any overt pronouns, as in simple transitive sentences and CL-ICs passives (which merges the verbal complement with TP). This is one possible explanation.

If what raises to Spec of T is not the issue, then it is also possible that the differences in acquisition are due to the generic null pronoun, where the generics in CL-ICs passives pose a greater challenge than the generics in CL-ICs impersonals, contrary to expectations and previous research. However, to claim that the CL-ICs impersonal is more marked because of this pronoun is false because all Cl-ICs *se/si* both possess a generic null pronoun as the Spec of *v*P. Thus, as children acquire CL-ICs with *se/si*, they unavoidably acquire this generic pronoun as well.

Therefore, in order to explain the unique patterns of acquisition in this empirical study, one can hypothesize that the CL-IC passive is the default form, and that the child's mental grammar does not allow for any generic null pronoun in the underlying grammar; otherwise, these two CL-IC forms with *se* would appear around the same moment in language development. Although this approach addresses the differences in acquisition between these similar forms, it still seems limited insomuch that it claims that children underlying grammar of CL-ICs with *se* differ from the adult form, which is highly speculative.

Another explanation is rooted in how Mendioketxea defines the features of the null generic pronoun, which she contends lacks referentiality (meaning lacking a semantically interpretable person feature) but still maintains a number feature. Considering that the generics in CL-ICs impersonal seem more challenging than those in CL-ICs passive, it is possible that the number feature present in CL-ICs with *se/si*, CL-ICs passive, and CL-ICs impersonal have different number features (singular vs. plural). This possible distinction can yield insight on the discrepancy in the acquisition of the two CL-ICs with *se*, since plural generic expressions (as in 'they') are less marked than singular generic ones (as in 'one'). ¹²

The notion that children struggle with singular generic pronoun, such as 'one' or a generic null pronoun, is empirically well documented. In fact, Gelman et al. (2008), in studying the emergence of generic language in language development, observe that although children produce generics quite early, they are "less likely to express generics using the indefinite singular," much like the pronoun 'one.' This finding not only offers an explanation for the delayed acquisition of

¹² The difference between plural generic expressions and singular generic ones are (a) and (b), respectively.

a) Bees are typically black and yellow.

b) Honey is extremely sweet.

CL-ICs impersonal, but also provides insight on the early emergence of CL-ICs passive. According to the results from their experiment, generics using the indefinite singular are equally constrained in adult speech and this is also true of impersonal constructions cross-linguistically as Blevins (2003) points out. Therefore, it is plausible that CL-ICs impersonal emerge later in the acquisition process because children are sensitive to this distributional constraint.

One can continue with the claim that CL-IC passive is the default form of CL-IC with se, which has two implications. First, the emergence of CL-ICs passive should precede the emergence of CL-ICs impersonal. As stated in the previous chapter, CL-ICs passive consistently emerge as the second form, with 50% of the acquisition of CL-ICs passive appearing at the same time as simple transitive forms. Second, children assume that CL-ICs are CL-ICs passive unless accompanied by specific markers (i.e. DAM, subject-verb discordance and accusative pronominalization). As Gelman et al (2008) contend and conclude, generic NPs should present once children have mastered the relevant linguistic forms, resulting in little to no lag between the mastery of necessary forms and the emergence of the observed forms (plural, articles, tense). Given that the emergence of the CL-IC impersonal significantly lags behind mastery of both the theoretic and actual expectations, the claim for CL-ICs passive as default has merit. CL-ICs impersonals appear much later than the acquisition of the theoretically expected acquisition of the DAM and se morpheme, which Rodríguez-Mondoñedo (2008) and Maldonaldo et al (1998) demonstrate appear quite early; and CL-ICs impersonal consistently appear much later than simple transitive sentences and CL-ICs passives (even though it is quite structurally similar to both forms and should lie somewhere in between their respective moments of acquisition).

Given that children acquire plural generics with much more ease than singular ones, it is possible that the generic null pronoun in the underlying grammars are different. That is, the GNP

in CL-ICs passive are systematically plural and the GNP in CL-ICs impersonal are systematically singular. This approach seems much more plausible, as it addresses the trends in the pattern with support from both Gelman et al.'s study and Mendikoetxea's theory; and this is the explanation that this thesis opts for.

6.2 Limitations

There are limitations to my research design and experiment. As described above, due to semantic and syntactic overlap between the two CL-IC with se/si, it is challenging to discern between them in an uncontrolled context. As a result, there are an excessive number of tokens that are considered ambiguous by the research design; and their removal may have effects on my results. However, absence of evidence does not entail of evidence of absence – the complete unambiguous approach does not necessarily nullify the complete tally. Rather it suggests that further research is necessary in investigating this nature of Cl-ICs with se/si not only in Spanish but in other Romance languages as well.

A secondary limitation to this experiment is that spontaneous child speech is uncontrolled, and therefore it is difficult to assess specific linguistic features. Once again, the absence of evidence in these cases does not imply evidence of absence. Because CL-ICs impersonal are not as often produced in adult Spanish¹³, it is possible that children may produce them well after they both understand and are **able** to produce them. This type of limitation also calls for a different type of research design that supports stronger inferences.

¹³ This is quite true for many languages, as Blevins (2003) points outs. Impersonals are used much less frequently than passive constructions.

One final limitation has to do with transcription variation in the CHILDES online corpora. Depending on what previous scholars were researching, researchers may have transcribed in one month, two months, six months and even yearly intervals. That is why the datasets presented in Appendix A and B show that the four children ages (in months) rarely overlap. More so, some children have more transcriptions at a given age than other students. For example, María often had 4-6 transcriptions per month. As a result, the tokens gathered are relatively higher than they are for the remaining three children. In any future research, this disparity has to be controlled among subjects.

6.3 Future Research

I am interested in following one claim that Mendikoetxea (1992, 2008) makes: these CL-IC se/si are structurally identical in Romance. If the claim that this reflexive morpheme patterns across the Romance languages is true, then it follows that this study can be equally applied to the related Romance languages. I think that this is possible and useful because of how different Romance languages possess different structural regulations regarding *se/si*, specifically French and Italian.

Spanish and Italian CL-IC impersonal *se/si* differ because the latter can allow reflexive clitic *si* whereas the former is much more limited in its use of other clitics. The paradigm gap is due to two conflicting morphophonological constraints. In constraint I, (1) below, Spanish third person dative clitics, *le* and *les*, change to *se* when they precede an accusative clitic. In constraint II, (2) below, two contiguous clitics *se* may not precede a verb. Therefore, CL-ICs impersonal are limited in scope, as they cannot impersonalize verbs with inherent *se* (i.e. *caerse* and *quejarse*) (Di Tullio, 2014), and they cannot pronominalize both accusative and dative objects. Examples (2b) and (3) demonstrate this conundrum.

(1) Constraint I

a. A los alumnus les daron (ellos) un ejemplo

ACC the students them-DAT give-PST-3PL (them) an example

'They gave an example to the students.'

b. A los alumnos se lo daron ACC the students

ACC the students se-CLITIC-DAT it-ACC give-PST-3PL

'They gave it to them, the students.'

(2) Constraint II

a. La gente se queja todo el tiempo

The people se-CLITIC-INH complain-PRE-3S all the time

'The people complain all the time.'

b. *En cualqueir sitio, se se queja todo el tiempo

In whichever place, se-CLITIC se-CLITIC-INH complain-PRE-3S all

'In all places, one complains all the time.'

(3) CL-IC se with 3rd person dative and accusative clitic

a.*A ellos se **les** los entregó

ACC they se-CLITIC them-DAT them-ACC sumbit-PST-3S

'One submitted them to them.'

b.*A ellos se se los entregó

ACC they se-CLITIC them-DAT them-ACC sumbit-PST-3S

'One submitted them to them.'

The Italian indefinite CL-IC *si* (impersonal expression), however, has established a way to bypass the conundrum posed in the second constraint. Maidena and Robustelli (2000) show that Italian permits the clitic *si* with verbs that require the reflexive clitic *si*. However, because "a sequence of two *si* pronouns is not allowed, instead the first *si* must become *ci*."

(4) Italian *ci si*

Ci si lava

CI-CLITIC-ALLO SI-CLITIC-REF wash-PRE-3S

'One washes oneself'

If the CL-IC with *se/si* are identical as Mendikoetxea claims, and given Spanish and Italian's different contraints on CL-IC with *se/si*, one could create additional subcategories and assess how children acquire the aggregate of these subcategories. Moreover, one can extend this project to include French as well, and given that it has different restraints on CL-IC *se* (being a no NS language) it can contribute an additional layer of depth to future analyses. Turley (1998) points

out that the impersonal reflexive *se* exist in French, albeit highly marked; and because it is a non-NS language, CL-ICs impersonal in French must include an expletive *il*. Any project that assesses the acquisition of this particular constraint will offer more robust conclusions about the role of generic pronouns (singular or plural) in the language acquisition mechanism. That is, the acquisition of the phonologically overt pronoun can either corroborate or refute the arguments that phonologically null pronouns are more marked, or that the generics in CL-ICs with *se/si* differ.

Nonetheless, there are many ways to approach this ongoing topic about clitic impersonal expressions with se/si. The theoretical analysis that Mendiokoetxea (2008) offers is novel, especially with the notion of the generic null pronoun for the CL-IC with *se/si*. Furthermore, her approach prompted this empirical study with four children from the CHILDES database. Specifically, I explore her notion of structural difference by assessing how these four children acquire simple transitive sentences, CL-IC passive and CL-IC impersonal, as well as the order of acquisition. Given the results provided in chapter 5, it follows that there is evidence that these forms are acquired at different intervals of language acquisition and development. Still, the experimental design has limitations that can affect the outcome of the results; and therefore, I offer that there are other ways to add to this research in the future, especially when considering Mendikoetxea's claim that these structures are inherent to the Romance languages.

APPENDIX A: Summary Dataset

Child Name	Age (Months)	LU	Simple Transitive Sentences	Impersonal Se	Passive Se
Eduardo	16 1	.00	0	0	0
Eduardo	17 1	.60	0	0	0
Eduardo	19 1	.48	0	0	0
Eduardo	21 1	.86	0	0	0
Eduardo	24 2	2.12	0	0	0
Eduardo	27 1	.48	0	0	0
Eduardo	28 2	2.05	0	0	2
Eduardo	31 2	2.15	0	0	0
Eduardo	34 2	2.09	1	0	1
Eduardo	37 1	.50	2	0	6
Eduardo	46 2	2.27	60	2	8
Emilio		.09	0		
Emilio		.09	0	0	0
Emilio	14 1	.00	0	0	0
Emilio	16 1	.06	0	0	0
Emilio	17 1	.06	4	0	0
Emilio	18 1	.04	1	0	0
Emilio	19	1.1	0	0	0
Emilio	20 1	.24	1	1	0
Emilio	21 1	.12	1	0	0
Emilio	22 1	.19	1	0	1
Emilio	23 1	.24	0	0	7
Emilio	24	1.3	1	0	0
Emilio	25 1		12	0	
Emilio		.75	39		
Emilio		2.18	44		
Emilio		.87	22		
Emilio		2.12	35		
Emilio		2.2	84		10
Emilio		2.17	125		4
Emilio		2.32	91	0	_
Emilio		2.88	108		
Emilio		5.23	42		
Emilio	48 2	2.68	45	1	1

Emilio	49 2.8	62	2	3
Emilio	54 3.12	76	7	6
Iago	23 1.00	0	0	0
Iago	24 1.29	0	0	0
Iago	28 1.65	4	0	0
Iago	29 1.87	0	0	0
Iago	30 1.53	4	0	0
Iago	32 1.82	0	0	0
Iago	33 2.31	1	0	0
Iago	34 2.04	9	0	0
Iago	35 2.15	5	0	0
Iago	36 2.64	10	1	0
Iago	38 2.15	7	0	2
Iago	39 2.70	12	0	3
Iago	40 3.97	18	0	2
Iago	41 2.01	9	0	1
Iago	42 3.18	15	0	10
Iago	46 2.68	2	0	2
Iago	47 3.07	30	1	6
Iago	48 2.65	10	0	1
Iago	49 3.54	14	0	6
Maria	19 2.27	1	0	2
Maria	21 2.31	20	0	3
Maria	22 2.31	28	0	16
Maria	23 3.02	81	8	21
Maria	24 3.55	95	3	25
Maria	25 3.58	101	9	13
Maria	26 4.34	153	11	18
Maria	28 4.71	159	12	17
Maria	29 5.34	220	13	19
Maria	30 5.21	177	2	14
Maria	32 5.37	208	6	27
Maria	35 5.77	156	3	10
Maria	42 8.18	252	13	21
Maria	43 7.04	203	8	6
Maria	46 6.63	103	10	6

APPENDIX B: Child Specific Datasets

	Target Child - Eduardo			Simple Transitive		Im	peros	nal						
Instance	Ttile	Age	MLU	Simple Transitive	DIS	DAM	NGT	FNC	PRO	TOT	INC	MID	COM	TOT
1	14.cha	1;4	1.00	0	0	0	0	0	0	0	0	0	0	0
2	15.cha	1;5	1.60	0	0	0	0	0	0	0	0	0	0	0
3	16.cha	1;7	1.48	0	0	0	0	0	0	0	0	0	0	0
4	17.cha	1;9	1.86	0	0	0	0	0	0	0	0	0	0	0
5	18.cha	2;0	2.12	0	0	0	0	0	0	0	0	0	0	0
6	19.cha	2;3	1.48	0	0	0	0	0	0	0	0	0	0	0
7	20.cha	2;4	2.05	0	0	0	0	0	0	0	2	0	0	2
8	21.cha	2;7	2.15	0	0	0	0	0	0	0	0	0	0	0
9	22.cha	2;10	2.09	1	0	0	0	0	0	0	1	0	0	1
10	23.cha	3;1	1.50	2	0	0	0	0	0	0	4	2	0	6
11	24.cha	3;10	2.27	60	0	0	0	0	2	2	7	0	1	8

	Target Cl	hild - Emilo		Simple Transitiv	Imperosnal									
Instance	<u>Ttile</u>	Age	MLU	Simple Transitiv	DIS	<u>DAM</u>	NGT	<u>FNC</u>	<u>PRO</u>	TOT	INC	MID	COM	TOT
1	e01.cha	0;11	1.09	0	0	0	0	0	0	0	0	0	0	0
2	e02.cha	1;0	1.09	0	0	0	0	0	0	0	0	0	0	0
3	e03.cha	1;02	1.00	0	0	0	0	0	0	0	0	0	0	0
4	e04.cha	1;04	1.12	0	0	0	0	0	0	0	0	0	0	0
5	e05.cha	1;04.25	1.00	0	0	0	0	0	0	0	0	0	0	0
6	e06.cha	1;05.20	1.06	4	0	0	0	0	0	0	0	0	0	0
7	e07.cha	1;06.09	1.02	0	0	0	0	0	0	0	0	0	0	0
8	e08.cha	1;06.20	1.05	1	0	0	0	0	0	0	0	0	0	0
9	e09.cha	1;07.11	1.10	0	0	0	0	0	0	0	0	0	0	0
10	e10.cha	1;08.13	1.29	0	0	0	0	0	0	0	0	0	0	0
11	e11.cha	1;08.23	1.19	1	0	0	0	1	0	1	0	0	0	0
12	e12.cha	1;09.19	1.12	1	0	0	0	0	0	0	0	0	0	0
13	e13.cha	1;10.10	1.08	0	0	0	0	0	0	0	0	0	0	0
14	e14.cha	1;10.19	1.30	1	0	0	0	0	0	0	1	0	0	1
15	e15.cha	1;11.12	1.24	0	0	0	0	0	0	0	7	0	0	7
16	e16.cha	2;00.02	1.30	1	0	0	0	0	0	0	0	0	0	0
17	e17.cha	2;01	1.35	4	0	0	0	0	0	0	4	0	0	4
18	e18.cha	2;1	1.50	8	0	0	0	0	0	0	6	0	0	6
19	e19.cha	2;03.01	1.75	39	0	0	0	0	0	0	0	0	0	0
20	e20.cha	2;04.17	2.18	44	0	0	0	0	0	0	8	0	0	8
21	e21.cha	2;05.24	1.87	22	0	0	0	0	0	0	3	0	0	3
22	e22.cha	2;06.18	2.12	35	0	0	0	0	0	0	4	0	1	5
23	e23.cha	2;07.09	2.29	31	0	0	0	0	0	0	1	0	0	1
24	e24.cha	2;07.24	2.10	53	0	0	0	1	0	1	6	0	3	9
25	e25.cha	2;08.28	2.17	125	0	0	0	1	0	1	3	1		4
26	e26.cha	2;11.08	2.16	62	0	0	0	0	0	0	2	0	2	4
27	e27.cha	2;11.24	2.49	29	0	0	0	0	0	0	1	0	1	2
28	e28.cha	3;10.01	3.00	84	0	0	0	6	0	6	3	0	1	4
29	e29.cha	3;10.14	2.76	24	2	1	0	1	0	4	4	0	2	6
30	e30.cha	3;11.26	3.23	42	1	1	0	3	0	5	6	0	4	10
31	e31.cha	4;00	2.68	45	0	0	1	0	0	1	0	0	1	1
32	e32.cha	4;01	2.71	33	0	1	1	0	0	2	2	0	1	3
33	e33.cha	4;01.23	2.89	29	0	0	0	0	0	0	0	0	0	0
34	e34.cha	4;06.01	3.10	37	1	1	0	1	0	3	0	0	0	0
35	e35.cha	4;08.16	3.13	39	1	0	2	1	0	4	2	0	4	6

Target Child - Iago			Simula Tuonsitina		Im	nal								
Instance	Ttile	Age	MLU	Simple Transitive	DIS	DAM	NGT	FNC	PRO	TOT	INC	MID	COM	TOT
1	elf1_01.cha	1;11.24	1.00	0	0	0	0	0	0	0	0	0	0	0
3	elf1_03.cha	2;00.28	1.29	0	0	0	0	0	0	0	0	0	0	0
4	elf1_06.cha	2;04.20	2.00	4	0	0	0	0	0	0	0	0	0	0
5	elf1_07.cha	2;04.28	1.30	0	0	0	0	0	0	0	0	0	0	0
6	elf2_01.cha	2;05.25	1.87	0	0	0	0	0	0	0	0	0	0	0
7	elf2_02.cha	2;06.09	1.50	4	0	0	0	0	0	0	0	0	0	0
8	elf2_03.cha	2.06.23	1.56	0	0	0	0	0	0	0	0	0	0	0
9	elf2_05.cha	2;08.17	1.82	0	0	0	0	0	0	0	0	0	0	0
10	elf2_06.cha	2;9	2.31	1	0	0	0	0	0	0	0	0	0	0
11	elf2_07.cha	2;10.05	2.41	8	0	0	0	0	0	0	0	0	0	0
12	elf2_08.cha	2;10.27	1.63	0	0	0	0	0	0	0	0	0	0	0
13	elf2_09.cha	2;10.27	2.08	1	0	0	0	0	0	0	0	0	0	0
14	elf2_10.cha	2;11.11	2.07	2	0	0	0	0	0	0	0	0	0	0
15	elf2_11.cha	2;11.23	2.23	3	0	0	0	0	0	0	0	0	0	0
16	elf3_01.cha	3;00.07	2.78	2	0	0	0	0	0	0	0	0	0	0
17	elf3_02.cha	3;00.21	2.51	8	1	0	0	0	0	1	0	0	0	0
18	elf3_03.cha	3;02.09	2.15	7	0	0	0	0	0	0	2	0	0	2
19	elf3_04.cha	3;03.13	2.61	6	0	0	0	0	0	0	1	0	1	2
20	elf3_05.cha	3;03.27	2.79	6	0	0	0	0	0	0	1	0	0	1
21	elf3_06.cha	3;04.13	3.97	18	0	0	0	0	0	0	2	0	0	2
22	elf3_07.cha	3;05.03	2.43	9	0	0	0	0	0	0	1	0	0	1
23	elf3_08.cha	3;05.24	1.59	0	0	0	0	0	0	0	0	0	0	0
24	el4_01.cha	3;06.08	3.18	15	0	0	0	0	0	0	10	0	0	10
25	elf4_02.cha	3;10.25	2.68	2	0	0	0	0	0	0	2	0	0	2
26	elf4_03.cha	3;11.09	2.92	18	0	1	0	0	0	1	3	0	1	4
27	elf4_04.cha	3;11.22	3.22	12	0	0	0	0	0	0	2	0	0	2
28	elf4_06.cha	4;00.20	2.65	10	0	0	0	0	0	0	1	0	0	1
29	elf4_07.cha	4;01.08	3.54	14	0	0	0	0	0	0	5	0	1	6

Target Child - María			Simple Transitive	Imperosnal						Passive					
Instance	Ttile	Age	MLU	Simple Transitive	DIS	DAM	NGT	FNC	PRO	TOT	INC	MID	COM	TOT	
1	01a.cha	1;7	2.18	0	0	0	0	0	0	0	0	0	0	0	
2	01b.cha	1;7	2.17	0	0	0	0	0	0	0	0	0	0	0	
3	01c.cha	1;7	2.01	0	0	0	0	0	0	0	0	0	0	0	
4	01d.cha	1;7	2.14	0	0	0	0	0	0	0	0	0	0	0	
5	01e.cha	1;7	2.46	1	0	0	0	0	0	0	0	0	0	0	
6	01f.cha	1;7	1.69	0	0	0	0	0	0	0	0	0	0	0	
7	01g.cha	1;7	2.50	0	0	0	0	0	0	0	1	0	0	1	
8	02a.cha	1;7	2.36	0	0	0	0	0	0	0	0	0	0	0	
9	02b.cha	1;7	3.65	0	0	0	0	0	0		0	0	0	_	
10	02c.cha	1;7	1.72	0	0	0	0	0	0	0	0	0	0	0	
11	02d.cha	1;7	2.27	0	0	0	0	0	0	0	1	0	0	1	
12	02e.cha	1;7	2.49	0	0	0	0	0	0	0	0	0	0	0	
13	02f.cha	1;7	2.08	0	0	0	0	0	0	0	0	0	0	0	
14	02g.cha	1;7	2.02	0	0	0	0	0	0	0	0	0	0	0	
15	03a.cha	1;9	2.55	5	0	0	0	0	0	0	0	0	0	0	
16	03b.cha	1;9	1.96	1	0	0	0	0	0	0	0	0	0	0	
17	03c.cha	1;9	2.19	2	0	0	0	0	0	0	0	0	0	0	
18	03d.cha	1;9	2.63	1	0	0	0	0	0	0	0	0	0	0	
19	04a.cha	1;9	2.32	2	0	0	0	0	0	0	1	0	0	1	
20	04b.cha	1;9	2.47	1	0	0	0	0	0	0	0	0	0	0	
21	04c.cha	1;9	2.71	2	0	0	0	0	0	0	0	0	0	0	
22	04d.cha	1;9	2.20	2	0	0	0	0	0	0	0	0	0	0	
23	04e.cha	1;9	2.13	0	0	0	0	0	0	0	1	0	0	1	
24	04f.cha	1;9	2.32	4	0	0	0	0	0	0	0	0	0	0	
25	04g.cha	1;9	1.98	0	0	0	0	0	0	0	1	0	0	1	
26	05a.cha	1;10	2.12	4	0	0	0	0	0	0	0	0	0	0	
27	05b.cha	1;10	2.48	4	0	0	0	0	0	0	2	0	2	4	
28	05c.cha	1;10	2.15	1	0	0	0	0	0	0	1	0	0	1	
29	05d.cha	1;10	2.64	12	0	0	0	0	0	0	2	0	0	2	
30	05e.cha	1;10	1.93	0	0	0	0	0	0	0	3	0	0	3	
31	05f.cha	1;10	2.83	6	0	0	0	0	0	0	4	0	0	4	
32	05g.cha	1;10	2.04	1	0	0	0	0	0	0	2	0	0	2	
33	06a.cha	1;11	1.91	7	- 1	0	0	0	0	1	3	0	0	3	
34	06b.cha	1;11	2.64	7	0	0	0	0	0	0	0	0	0	0	
35	06c.cha	1;11	3.16	16	1	0	0	0	0	1	1	1	7	9	
36	06d.cha	1;11	3.44	27	3	0	0	0	0		5	0	1	6	
37	06e.cha	1;11	3.09	9	1	1	0	0	0	2	1	0	0	1	
38	06f.cha	1;11	4.01	13	0	0	0	0	0	0	0	0	1	1	
39	06g.cha	1;11	2.86	2	0	0	1	0	0	1	1	0	0	1	
40	07a.cha	2;0	3.07	5	0	0	0	0	0	0	0	0	0	0	

41	07b.cha	2;0	3.25	17	0	0	0	0	0	0	1	0	0	1
42	07c.cha	2;0	4.94	7	1	1	0	0	0	2	11	0	8	19
43	07d.cha	2;0	3.55	15	1	0	0	0	0	1	0	0	1	1
44	07e.cha	2;0	3.69	29	0	0	0	0	0	0	0	0	2	2
45	07f.cha	2;0	3.25	15	0	0	0	0	0	0	2	0	0	2
46	07g.cha	2;0	3.13	7	0	0	0	0	0	0	0	0	0	0
47	08a.cha	2;1	4.23	12	0	0	5	0	0	5	2	0	0	2
48	08b.cha	2;1	3.23	18	0	0	0	2	0	2	0	0	0	0
49	08c.cha	2;1	2.92	16	0	0	0	0	0	0	0	0	2	2
50	08d.cha	2;1	4.78	13	0	1	0	0	0	1	7	0	0	7
51	08e.cha	2;1	3.73	17	1	0	0	0	0	1	1	0	1	2
52	08f.cha	2;1	2.36	4	0	0	0	0	0	0	0	0	0	0
53	08g.cha	2;1	3.80	21	0	0	0	0	0	0	0	0	0	0
54	09a.cha	2;2	2.93	19	0	0	0	0	0	0	0	0	0	0
55	09b.cha	2;2	3.05	23	0	0	0	0	0	0	0	0	0	0
56	09c.cha	2;2	4.93	30	1	0	0	0	0	1	0	1	1	2
57	09d.cha	2;2	5.06	26	1	0	0	0	0	1	2	0	4	6
58	09e.cha	2;2	5.03	30	0	0	0	4	1	5	2	0	0	2
59	09f.cha	2;2	4.06	17	1	0	0	0	0	1	0	0	2	2
60	09g.cha	2;2	5.35	8	2	1	0	0	0	3	2	4	0	6
61	10a.cha	2;4	4.28	16	0	0	0	2	0	2	1	0	0	1
62	10b.cha	2;4	5.17	20	0	0	0	0	0	0	10	0	0	10
63	10c.cha	2;4	5.06	41	5	1	0	0	1	7	0	0	0	0
64	10d.cha	2;4	4.32	30	2	0	0	0	0	2	0	0	4	4
65	10e.cha	2;4	3.48	18	0	0	0	0	- 1	1	0	0	0	0
66	10f.cha	2;4	4.68	24	0	0	0	0	0	0	0	0	0	0
67	10g.cha	2;4	6.00	10	0	0	0	0	0	0	1	0	1	2
68	11a.cha	2;5	4.76	17	0	0	0	0	0	0	3	0	0	3
69	11b.cha	2;5	3.19	14	0	0	0	0	0	0	0	0	0	0
70	11c.cha	2;5	5.32	28	- 1	0	0	0	0	1	5	0	1	6
71	11d.cha	2;5	5.84	34	0	1	0	4	2	7	3	0	1	4
72	11e.cha	2;5	6.74	62	2	0	0	1	0	3	0	0	0	0
73	11f.cha	2;5	6.89	48	- 1	0	1	0	0	2	6	0	1	7
74	11g.cha	2;5	4.62	17	0	0	0	0	0	0	0	0	0	0
75	12a.cha	2;6	5.05	38	0	0	0	0	0	0	0	0	0	0
76	12b.cha	2;6	5.19	17	0	0	0	1	0	1	3	0	1	4
77	12c.cha	2;6	4.93	26	0	0	0	0	0	0	6	0	0	6
78	12d.cha	2;6	5.37	28	0	0	0	0	0	0	0	0	0	0
79	12e.cha	2;6	5.93	25	0	0	0	0	0	0	1	0	3	4
80	12f.cha	2;6	5.35	25	0	0	0	0	1	1	0	0	0	0

81 12g.cha 2;6 4.65 18 0 1 1 0	0			(1)	0
83 13b.cha 2;8 5.24 50 0	1.7	- 0		0	0
84 13c.cha 2;8 6.09 26 0 0 1 0 1 85 13d.cha 2;8 7.12 48 0 1 0 0 0 1 86 13e.cha 2;8 4.41 33 2 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-	_			0
85 13d.cha 2;8 7.12 48 0 1 0 0 0 1 86 13e.cha 2;8 4.41 33 2 0 0 0 1 3 87 13f.cha 2;8 4.77 21 0 1 1 0 0 0 0 1 1 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	_	-	0	1
86 13e.cha 2;8 4.41 33 2 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1	1		-	0	1
87 13f.cha 2;8 4.77 21 0 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0	19	_		0	19
88 14a.cha 2;11 6.99 28 1 0 0 0 0 1 89 14b.cha 2;11 5.88 37 0 0 1 0 0 1 90 14c.cha 2;11 8.84 40 0 0 0 0 1 1 91 14d.cha 2;11 4.45 16 0 0 0 0 0 92 14e.cha 2;11 4.37 10 0 0 0 0 0 93 14f.cha 2;11 4.81 16 0 0 0 0 0 94 14g.cha 2;11 5.06 9 0 0 0 0 0 95 15a.cha 3;6 12.87 51 0 0 0 0 0 96 15b.cha 3;6 9.73 68 0 1 2 0 0 3	5			2	7
89 14b.cha 2;11 5.88 37 0 0 1 0 0 1 90 14c.cha 2;11 8.84 40 0 0 0 0 1 1 91 14d.cha 2;11 4.45 16 0 <td>0</td> <td>-</td> <td>-</td> <td>0</td> <td>0</td>	0	-	-	0	0
90 14c.cha 2;11 8.84 40 0 0 0 0 1 1 91 14d.cha 2;11 4.45 16 0	0	-		0	0
91 14d.cha 2;11 4.45 16 0 0 0 0 0 92 14e.cha 2;11 4.37 10 0 0 0 0 0 93 14f.cha 2;11 4.81 16 0 0 0 0 0 94 14g.cha 2;11 5.06 9 0 0 0 0 0 95 15a.cha 3;6 12.87 51 0 0 0 0 0 96 15b.cha 3;6 9.73 68 0 1 2 0 0	0	0	-	1	1
92 14e.cha 2;11 4.37 10 0 0 0 0 0 93 14f.cha 2;11 4.81 16 0 0 0 0 0 0 94 14g.cha 2;11 5.06 9 0 0 0 0 0 95 15a.cha 3;6 12.87 51 0 0 0 0 0 96 15b.cha 3;6 9.73 68 0 1 2 0 0 3	1	1	_	0	3
93 14f.cha 2;11 4.81 16 0 0 0 0 0 94 14g.cha 2;11 5.06 9 0 0 0 0 0 0 95 15a.cha 3;6 12.87 51 0 0 0 0 0 96 15b.cha 3;6 9.73 68 0 1 2 0 0 3	0	0	-	3	3
94 14g.cha 2;11 5.06 9 0 0 0 0 0 95 15a.cha 3;6 12.87 51 0 0 0 0 0 96 15b.cha 3;6 9.73 68 0 1 2 0 0 3	0	0	0	0	0
95	0			1	2
96 15b.cha 3;6 9.73 68 0 1 2 0 0 3	2	2	. 0	0	2
	0	0	1	2	
97 15c cha 3:6 6.53 27 0 0 0 0 0	0	0	0	2	2
77 130 mm 5,0 0.00 27 0 0 0 0 0	0	0	0	5	5
98 15d.cha 3;6 7.53 45 2 0 0 1 0 3	0	0	0	5	5
99 15e.cha 3;6 6.95 31 0 0 0 0 0	0	0	0	0	0
100 15f.cha 3;6 6.58 11 0 0 0 0 0	0	0	0	0	0
101 15g.cha 3;6 7.05 19 0 0 6 1 0 7	5	5	0	1	6
102 16a.cha 3;7 8.41 28 0 0 0 0 0 0	2	2	. 0	0	2
103 16b.cha 3;7 6.47 36 0 0 0 0 0 0	0	0	0	0	0
104 16c.cha 3;7 4.46 17 0 0 0 0 0 0	0	0	0	0	0
105 16d.cha 3;7 6.24 35 0 1 1 0 0 2	0	0	0	0	0
106 16e.cha 3;7 6.82 45 0 0 0 0 0 0	0	0	0	0	0
107 16f.cha 3;7 7.81 33 0 0 2 0 0 2	0	0	0	4	4
108 16g.cha 3;7 9.08 9 0 1 0 0 3 4	0	0	0	0	0
109 17a.cha 3;10 8.91 28 0 0 1 0 0 1	2	2	. 0	0	2
110 17b.cha 3;10 7.90 14 2 0 0 0 0 2	0	_		0	0
111 17c.cha 3;10 7.22 21 0 0 1 1 0 2	0	0	0	0	0
112 17d.cha 3;10 6.58 16 0 0 0 1 3 4	1	-		1	2
113 17e.cha 3;10 3.65 11 0 0 0 0 0	1			0	1
114 17f.cha 3;10 6.18 5 0 0 1 0 0 1	0		_	0	0
115 17g.cha 3;10 6.00 8 0 0 0 0 0 0	0	_		1	1

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